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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,391	03/27/2001	Kunihiro Yamamoto	B588-017	2786

26272 7590 11/03/2005

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EXAMINER

NGUYEN, CINDY

ART UNIT PAPER NUMBER

2161

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/818,391	Applicant(s) YAMAMOTO ET AL.	
	Examiner Cindy Nguyen	Art Unit 2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/30/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7, 9-11, 15, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9-11, 15, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/05 has been entered.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7, 9-11, 15, 17, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 6757428) (Lin).

Regarding claims 1, 9 and 17, Lin discloses: An image retrieval apparatus for retrieving a desired image from a plurality of stored images, comprising:

storage means for storing the plurality of images and a set of image features of each of the plurality of images in a form correlated with the images (col. 8, lines 40-52, Lin), wherein the image features of each image include image features of tile images obtained by dividing an image into a predetermined number of tiles (col. 9, lines 58 to col. 10, lines 6, Lin);

feature calculation means for dividing a retrieval source image¹ into the predetermined number of tile images and obtaining a set of image features by calculating an image feature of each of the tile images (col. 9, lines 1-13 and col. 9, lines 58 to col. 10, lines 6, Lin);

acquisition means for generating image features by multiplying each of the image features constituting the set of image features that have been stored in said storage means, by a constant and acquiring plural sets of image features regarding one image by varying the constant (col. 10, lines 15-39 and col. 16, lines 38-50, Lin).

Similarity calculating means calculating degree of similarity between each of the plurality of images (template image object and region of interesting of object) and the

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retrieval source image based upon the plural sets of image features (color categories) acquired by the acquisition means and the set of image features calculated by the feature calculation means, wherein said similarity calculating means calculates degree of similarity between each the plural sets of image features acquired by said acquisition means (col. 14, lines 58 to col. 15, lines 28, Lin) and the set of image features calculated by said feature calculation means, and adopts maximum degree of similarity (degree of color similarity) as the degree of similarity between a particular image and the retrieval-source image (col. 16, lines 38-50, Lin); retrieval means for retrieving the desired image from the plurality of stored images based on the degrees of similarity between the plurality of stored image and the retrieval source image, calculated by said similarity calculating means (col. 16, lines 38-50, Lin).

Regarding claims 2 and 10, most of the limitations of these claims have been noted in the rejection of claims 1 and 9 above, respectively. In addition, Lin discloses: wherein said acquisition means generates N sets of image features by multiplying a luminance component of the image features that have been stored in said storage means by N constants (col. 16, lines 38-50, Lin).

Regarding claims 3 and 11, most of the limitations of these claims have been noted in the rejection of claims 1 and 9 above, respectively. In addition, Lin discloses: wherein said acquisition means generates N sets of image features by multiplying a color difference component of the image features that have been stored in said storage means by N constants (col. 16, lines 38-50, Lin).

¹ Retrieval source image as load target image.

Regarding claims 7 and 15, most of the limitations of these claims have been noted in the rejection of claims 1 and 9 above, respectively. In addition, Lin discloses: wherein said acquisition means has specifying means for allowing an operator to specify number of steps over which image features are varied as well as the amount of change provided by each step (col. 23-37, Lin).

Regarding claims 19 and 20, Lin discloses: an image retrieval apparatus and method for retrieving a desired image from a plurality of stored images, comprising: input means for inputting a retrieval source image, the retrieval source image including color components (col. 39-to col. 14, lines 53, Lin); feature calculating means for obtaining a set of image features calculating image feature of each color component of the retrieval source image, respectively (col. 14, lines 58 to col. 15, lines 28, Lin); selection means for selecting one image from a plurality of images stored in a database (col. 12, lines 40-52, Lin); reading means for reading a set image features of the selected image (col. 12, lines 54-65, Lin); generation means for generating a set of image features by multiplying the set of image features of the retrieval source image or the set of image features of the selected image by a variable (col. 9, lines 58 to col. 10, lines 6, Lin); calculation means for calculating a set of degrees of similarity between the retrieval source image and the selected image, using the set of features generated by said generation means (col. 16, lines 38-50, Lin); determination means for determining single degree of similarity from the set of degrees of similarity as a degree of similarity between the retrieval source image and the selected image (col. 16, lines 38-50, Lin);

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retrieval means for retrieving the desired image by repeating process by said selection means, said reading means, said generation means and said determination means (col. 16, lines 38-50, Lin).

1. Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Normile et al. (U.S 5872864). Method and system for automatic classification of video images.

Foote et al. (U.S 6404925). Methods and apparatuses for segmenting an audio visual recording using image similarity searching and audio speaker recognition.

Abbel-Mottaleb et al. (U.S 6263113). Method for detecting a face in a digital image.

Abbel-Mottaleb et al. (U.S 5915038). Using index keys extracted from JPEG-compressed images from image retrieval.

Shiiyama (U.S 6400853). Image retrieval apparatus and method.

2. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen
October 27, 2005


FRANTZ COBY
PRIMARY EXAMINER